I claim:

1. In a data processing system capable of supporting simultaneous operation of a plurality of kernel function calls and a plurality of system calls, a method of operation during execution of a kernel function call comprising the steps of :

(a) monitoring for a complication,

(b) if a complication occurs, performing the additional steps of

    (1)   promoting from the kernel function call to a system call, and

    (2)   handling the complication in the system call.

2) The method of claim 1 wherein step b) comprises the additional steps of:

    (3)   monitoring for a suspend state in system call processing; and

    (4)   if a suspend state occurs, demoting from the system call to a kernel function call.

3) The method of claim 2 wherein step (b)(1) includes the step of assigning a kernel stack to the system call and step (b)(4) includes the step of releasing the kernel stack.

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4) The method of claim 1 wherein step (b)(1) comprises the steps of:

    (i)   storing the parameters to be passed to the system call, and

    (ii) initiating the system call.

5) The method of claim 1 wherein step (b)(1) includes the step of passing to the system call an identifier specifying the phase of LWP execution that was in progress at the time the complication occurred

6) The method of claim 5 wherein step (b)(2) includes the additional steps of:

    (i)   checking the phase identifier passed in step (b)(1), and

    (ii) initiating system call processing within the kernel system call at the equivalent location within the system call of the same phase indicated by the phase identifier.

7) The method of claim 1 wherein step (b)(1) includes the step of releasing the spin lock if the kernel function call holds a spin lock.